

Abstract

A method enhances electronic messaging techniques applied to interactive exchanges of complex subject matter expressed through such diverse content as text, mathematic formulae, chemical expressions, and graphics. The method includes processes and techniques to (a) communicate abstract concepts through animated sequences of mathematic formulae, scientific expressions, and data visualizations; (b) encode such expressions and visualizations in a way to facilitate their inclusion in messages exchanged by readers during educational discourse, and (c) transfer and render such expressions, visualizations, and annotations to other users in the form of digitally transmitted display pages. The method includes a technique to encode digital content in a fashion to allow for the creation of text messages and the convenient inclusion of annotations to reference both textual, and non-textual media elements.